

Information for Building Control Officers and Approved Inspectors

Golden Rules to Ensure Part L Is Met

Ensure that the air tightness test is carried out by a member of the ATTMA – Air Tightness Testing and Measurement Association. The DCLG recognises members as being ‘suitably qualified’ and/or ‘recognised qualifications’ to carry out air tests.

Answers to the Most Frequently Asked Questions

What if and how will a building fail the air tightness Part L?

A building will fail Part L if the air permeability rate is $> 10 \text{ m}^3/\text{h}/\text{m}^2$. More stringent requirements may be in place, depending on the requirements within the building energy calculation to satisfy the carbon emissions target.

Buildings could also fail if thermographic inspections of the visible envelope, shows that insulation is not reasonably continuous.

How accurate are the tests?

ATTMA TS1 states that fan flow rates should be measured to $\pm 7\%$.

The accuracy of the air leakage pressure test itself will be affected by the strength and gustiness of the wind. The wind will impose both positive and negative pressures on the building envelope, which will vary during the test. ATTMA TS1 states that tests should normally only be carried out when wind speeds are below 6 m/s. Occasionally a test may have to be carried out in wind speeds above this. Decisions will be made on a job specific basis.

How can fire walls be made airtight?

Use the same principles of design and construction as for other air tightness works but use fire rated materials. Compliance to various sections of Part L1 and L2 can be achieved by a ‘competent person’ reviewing the design and/or site works and deeming them adequate. These Sections include air tightness for buildings and continuity of insulation for all buildings. HRS can take on this role and issue the necessary declaration to the Building Control Officer.

HRS Services Ltd have air tightness testing equipment suitable for testing buildings with floor areas from 100 to 20,000 square metres. For small buildings HRS use their PORTAFAN systems which are 710 mm diameter fans which can be built into sets of up to 4 fans. These are electrically powered, quiet, clean and as the name suggests portable. They can easily test whole buildings or if necessary be erected inside buildings to test plenums, service ducts, fire compartments, upper storeys, extensions, etc, etc.

To test larger buildings HRS have developed the MIDIFAN and MEGAFAN systems which are 1.25m & 2m diameter fans respectively. Self powered, the MIDIFAN's and MEGAFAN have been designed to test the largest buildings in the UK. The MEGAFAN is three times larger than any other testing rig in the UK. A major advantage of the unit is that it is self contained with all ancillary equipment including smoke testing equipment. When other air test companies state that they haven't the equipment to test the building, you know where to come.

